

Applicant Name Glacier County Conservation District
Project Name Marias River Bridge Road Stabilization

Project Abstract

Bank erosion on the Marias River near Pugsley Bridge and erosion on Cut Bank Creek near Sullivan Bridge are destroying two streambanks and their adjoining roads within the Marias River Watershed (MRW). This application will fund a Preliminary Engineering Report (PER) on two separate sections of Marias River waterways. While in two separate locations, and requiring two separate solutions, they will both be managed as one project to take advantage of the bargaining power in negotiating contracts and project management coordination.

Sullivan Bridge Road on Cut Bank Creek

The proposed project will address the issue of excessive sediment deposit in Cut Bank Creek. The bank-cutting action is combined with spring runoff, cloudbursts, and other rainfall events to create extensive erosion of Sullivan Bridge Road. The sediment is entering Cut Bank Creek approximately 0.3 of a mile before it joins Two Medicine River at the confluence of the Marias River in the southeast corner of Glacier County.

This erosion is cutting deep channels in the banks and washing away the streambank so the narrowing road has become a safety hazard. Farmers and ranchers use this road for access to land and communities on both sides of the rivers. Erosion is also depositing large quantities of sediment into the mouth of the creek and its confluence with the Marias River. The problem is compounded by a sharp, 90-degree bend in Cut Bank Creek that contributes to river bank deterioration.

An alternative analysis was completed by a consulting engineer in April 2006 and provided the MRW with suggested solutions to the erosion. The MRW-Technical Advisory Committee (TAC) has chosen to move forward with the alternative of installing in-stream structures to manipulate the channel's geometry and flow.

Pugsley Bridge Road

Pugsley Bridge is located on the Marias River, 4.43 river miles downstream from Tiber Dam and Lake Elwell in Liberty County. The bridge is historically significant as one of the few remaining steel cable suspension bridges in the United States, and is an important link for landowner and recreational access to that area of the Marias River.

The river flow around the north support of the bridge is creating downstream erosion of the riverbank that parallels the road. Sediment buildup immediately below the bridge is creating an island with the potential for changing the location of the river channel.

An alternative analysis was completed in April 2006 by a consulting engineer. Based on the engineer's analysis, the MRW-TAC has selected the preferred alternative for each project. Funds are being requested to complete the next step in the process by completing the preliminary engineering field work and design to produce a geomorphological analysis, reference reach analysis, environmental analysis and develop construction designs and specifications for each of the sites. Additionally, a project manager will be contracted to research and secure funds necessary to complete the remaining construction phase of the projects and to develop the organizational structure for coordination of the current and future project tasks.